

Appl. No. 10/617,575
Amdt. Dated Sep. 28, 2004
Reply to Office Action of August 16, 2004

REMARKS

Applicant appreciates the Examiner's indication of allowabilities of claims 6 and 9. Anyhow, Applicant believes that the viewpoint of the Examiner is improper, and would rather argue against the rejected claims in details.

Claim Rejections under 35 U.S.C. 103

Claims 1-5, 7-8, 10-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsumi (U.S. Patent No. 5,664,326) in view of Peloza (U.S. Patent No. 5,362,260).

Regarding claim 1, a cable assembly defined therein comprises an insulating housing defining a plurality of contacts cavities, a plurality of contacts received in corresponding cavities, and a plurality of cables terminated to the tail portions of corresponding contacts. Each contact comprises an intermediate portion, a central contact beam extending from one end of the intermediate portion and being deflectable relative to the intermediate portion along a first direction, a pair of side contact beams extending from two opposite sides of the intermediate portion and being deflectable relative to the intermediate portion along a section direction different from the first direction, and a tail portion extending from an opposite end of the intermediate portion.

Ohsumi discloses a cable assembly comprising a contact (B) received in a corresponding cavity (1) of an insulating housing (A). The contact includes an intermediate portion (5), a folded elastic connecting strip (8) extending from one

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end of the intermediate portion and a tail portion (B2) extending from an opposite end of the intermediate portion and terminated to a cable (W). The connecting strip (8) is deflectable relative to the intermediate portion along a first/vertical direction. However, Ohsumi does **NOT** disclose the housing having a plurality of cavities receiving a plurality of cables and contacts having a pair of side contact beams extending from two opposite sides of the intermediate portion.

Peloza discloses a dielectric housing (12) having a plurality of terminal-receiving cavities (14), a plurality of female terminals (16) received in corresponding cavities, and latching means including a pair of latch arms (40) provided at the terminal and a restricted cross-sectional area (50) in each terminal-receiving cavity for holding the terminals in the terminal-receiving cavities. Examiner mistakes the latch arms (40) for the so-called side contact beams of the present invention. As disclosed in column 3, lines 34-62 of the specification of Peloza, the mating portion (20) of each terminal (16) is generally rectangularly shaped as defined by bottom wall means (32), opposite side wall means (34) and top wall means (36). The bottom and top wall means (32) and (36), respectively, are bent inwardly as best seen in FIGS. 1 and 2 and provide for resilient engagement of mating portion (20) with a mating male terminal. Opposite ends of the latch arms are attached at the top wall of the mating portion of the terminal by front and rear flexible tabs 44 and 46, respectively. The latch arms are capable of being flexed or biased inwardly, i.e. transverse to axis 18. From the above description, it is known that *the latch arms of Peloza are used to hold the terminal in the terminal-receiving cavity rather than mating with a complementary terminal.* However, *the side contact beams of the present invention are used to mate with a complementary terminal.* Therefore, the latch arms of Peloza is

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substantially different from the side contact beams of the present invention. In addition, Examiner believes that the latching arms (40) is deflectable relative to the intermediate portion (28) along a second direction (transverse to axis 18) different from said first direction. However, it is incorrect. *As is disclosed in column 4, lines 4-15 of the specification of Pelozza that the restricted area (50) biases the latch arms (40) inwardly in the direction of arrow "C" (as shown in FIG. 5), it is clear that the latch arms are still deflectable along the vertical direction which is defined as the first direction in claim 1, NOT the second direction different from the first direction.*

Neither Ohsumi nor Pelozza discloses a pair of side contact beams extending from two opposite sides of the intermediate portion and being deflectable relative to the intermediate portion along a section direction different from the first direction. Even if it is obvious for one having ordinary skill in the art at the same invention was made to modify the assembly of Ohsumi by providing a pair of latch arms (40) of the terminal disclosed in Pelozza, the combination thereof forms a modified terminal having a central contact beam (8) and a pair of resilient arms (40) and both the central contact beam (8) and the resilient arms (40) are still deflectable relative to the intermediate portion in the first/vertical direction. Combination of Ohsumi and Pelozza cannot still render obvious a pair of side contact beams being deflectable relative to the intermediate portion along a section direction different from the first direction as defined in claim 1.

In brief, the subject invention as recited in claim 1, defines **(I)** the central contact beam deflectable relative to the intermediate portion in a first direction, and **(II)** the side contact beams deflectable relative to the intermediate portion in a

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second direction different from the first direction. Anyhow, the combination of the cited references defines both the central contact beam and the side contact beams deflectable relative to the intermediate portion in the same first direction instead of two different directions. Thus, it is unobvious.

On the other hand, in Pelozza the "closed type" structures of latch arms (40) and the low profiled top and bottom wall (36, 32) essentially commonly define a restricted room which is *too* tiny *to* cooperate with another central contact provided in Ohsumi for forming a three-beam type contact arrangement as defined in the instant invention. Accordingly, *either* the direct combination of Pelozza and Ohsumi is inoperative/impossible, *or* such a combination is required to be further modified for overcoming inoperativeness, e.g. in Pelozza upwardly raising/extending the two side contact beams (36) or removing the closed type latch arms (40) for facilitating reception/extension of the central contact beam (8) of Ohsumi thereunder, as suggested in the instant invention. Anyhow, both of these two conditions indicate non-obviousness of such a hypothetical combination.

Therefore, the modified terminal is obviously different from the terminal defined in claim 1. Claim 1 is patentable over Ohsumi in view of Pelozza.

Claims 2-11 are also patentable since they depend from claim 1, either directly or indirectly.

Each of the independent claims 12 and 16 comprises the limitation that "...the central contact beam being deflectable relative to the intermediate portion along a first direction, ...a pair of side contact beams being deflectable relative to the

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intermediate portion along a second direction different from the first direction..." which is also the limitation of claim 1, therefore, for the similar reasons regarding claim 1, claims 12 and 16 are also patentable over Ohsumi in view of Pelosa.

Claims 13-15 and 18 are also patentable since they respectively depend from claims 12 and 16, either directly or indirectly.

In view of the above claim amendments and remarks, the subject application is believed to be in a condition for allowance and an action to such effect is earnestly solicited.

Respectfully submitted,
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